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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/758,587      | 01/15/2004  | Hubert Bruhl         | MB 382              | 5398             |

7590 06/06/2006

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| EXAMINER |
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| ART UNIT | PAPER NUMBER |
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3616

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                       |                                     |  |
|------------------------------|---------------------------------------|-------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/758,587  | <b>Applicant(s)</b><br>BRUHL ET AL. |  |
|                              | <b>Examiner</b><br>Laura B. Rosenberg | <b>Art Unit</b><br>3616             |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/15/04; 7/23/04</u> | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 1 and 6 are objected to because of the following informalities:

“the” should be deleted from “the roll movements” (claim 1, line 1);

“the vehicle longitudinal direction” should be changed to --a vehicle longitudinal direction-- (claim 1, line 5);

“the” should be deleted from “the two ends” (claim 1, line 6);

“filled being” is grammatically incorrect and should be reworded (claim 1, line 17);

“the plane” should be changed to --a plane-- (claim 6, line 2);

“the vehicle longitudinal axis” should be changed to --a vehicle longitudinal axis-- (claim 6, lines 2-3);

“these coupling yoke parts” should be changed to --these yoke parts-- (claim 6, line 3).

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites the limitations “said opposite ends” in line 8, “the piston” in line 19, “the respective cylinders” in lines 20-21; claim 4 recites

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the limitations "the damping fluid" in lines 1-2, "the valves" in line 2; claim 5 recites the limitation "the coupling yoke" in lines 1-2; claim 6 recites the limitation "the coupling yoke" in lines 1-2. There is insufficient antecedent basis for these limitations in the claims.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jensen (5,362,094) in view of Kuwayama et al. (4,973,077). Jensen discloses a device (including system #10) able to minimize roll movements of a vehicle body with wheel suspensions, including:

- Torsion-resistant rod member (including #14) mounted pivotably (for example, via brackets #16A, 16B) on the vehicle body (including #18) and oriented approximately transversely to a vehicle longitudinal direction (best seen in figure 1)
- Two parallel and bend-resistant cantilever arms (including #20A, 20B) connected to opposite ends of the torsion-resistant rod member and extending approximately horizontally from the opposite ends when the vehicle is in a neutral position (can be seen in figure 1)
- Each cantilever arm having a free end (for example, near #38A, 38B)

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- Approximately vertically oriented spring/damper unit (including #24A, 24B) articulated to each of the free ends and operatively connected to an axle or wheel-guide component (for example, #22A, 22B) of a wheel suspension of the vehicle
- Each spring/damper unit comprising a cylinder/piston structure (for example, as seen in figure 2) filled with hydraulic fluid (for example, as explained in columns 2-3) and including a piston (including #30A, 30B)
- Rod member and cantilever arms form a “one-part coupling yoke” (including #12; best seen in figure 1)

Jensen does not specifically disclose the piston each cylinder/piston structure being centered, free of play, so as to be pre-stressed between at least two spring elements, or separate communication passages with at least one automatically opening throttle valve extending through the piston.

Kuwayama et al. teach a device able to minimize roll movements of a vehicle body with wheel suspensions, including a rod member (for example, including #80) and a vertically oriented spring/damper unit (including #1) comprising a cylinder/piston structure (for example, embodiments seen in figures 1, 2, 4-7) filled with hydraulic fluid and including a piston (including #6) that is centered, free of play, in the respective cylinder (including #2) so as to be pre-stressed between at least two springs (including #11, 12). There are separate communication passages with at least one automatically opening throttle valve extending through the piston for each direction of piston movement (for example, as seen in embodiments shown in figures 4-7). It would have been obvious to one skilled in the art at the time that the invention was made to modify

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each cylinder/piston structure of the spring/damper units of Jensen such that it comprised a piston that is centered, free of play, so as to be pre-stressed between at least two spring elements, and separate communication passages with at least one automatically opening throttle valve extending through the piston as claimed in view of the teachings of Kuwayama et al. so as to center and hold the piston in a neutral position, thus making more effective the anti-roll effect of the stabilizer device (Kuwayama et al.: Summary of Invention).

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jensen (5,362,094) in view of Kuwayama et al. (4,973,077), further in view of Urbach (6,457,730). Jensen does not specifically disclose that the hydraulic fluid is rheological fluid. Urbach teaches a device able to minimize roll movements of a vehicle body with wheel suspensions, including a rod member (for example, including #28) and a vertically oriented spring/damper unit (for example, including #148) comprising a cylinder/piston structure (for example, as seen in figure 5) filled with hydraulic fluid and including a piston (including #80), wherein the damping fluid is rheological fluid (column 7, lines 52-53) and valves can be controlled by electrical means (including electrodes, leads, and controller, as described in column 7). It would have been obvious to one skilled in the art at the time that the invention was made to modify the device of Jensen such that it comprised rheological fluid and electrical control means as claimed in view of the teachings of Urbach so as to change the viscosity of the fluid, thus altering the resistance to movement of the piston, resulting in the ability to further adjust the

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torsional stiffness of the anti-roll bar based on signals received from various vehicle sensors (Urbach: column 7, lines 43-60).

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jensen (5,362,094) in view of Kuwayama et al. (4,973,077), further in view of Kozaki et al. (4,834,419). Jensen does not specifically disclose the brackets (including #16A, 16B) that connect the coupling yoke (including #12) to the vehicle body (including #18) being bearings. Kozaki et al. teach a device able to minimize roll movements of a vehicle body with wheel suspensions, including a coupling yoke (for example, including stabilizer #1A) pivotally supported on the vehicle body by bearings (including #3a, 3b). It would have been obvious to one skilled in the art at the time that the invention was made to modify the coupling yoke of Jensen such that it comprised bearings as claimed in view of the teachings of Kozaki et al. so as to provide a low friction attachment of the stabilizer bar to the vehicle body. Further, it is old and well known in the art to use bearings for this type of attachment because they allow for better movement with less wear and tear.

***Allowable Subject Matter***

8. Claim 6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Capgras discloses a split stabilizer with rubber bearings for attachment to the vehicle body.

Takadera et al. disclose a stabilizer bar connected to the vehicle body with a damper that has two springs.

Heyring et al., Germain et al., Oakley et al., and Ito disclose a stabilizer bar with a rod and two cantilever arms connected to respective suspension components with dampers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura B. Rosenberg whose telephone number is (571) 272-6674. The examiner can normally be reached on Monday-Friday 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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